UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,699	06/25/2003	Roberto Gianella	CISCP826	3398

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EXAMINER
SU, BENJAMIN

ART UNIT	PAPER NUMBER
2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after t he mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>25 June 2003</u>.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-20</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>25 June 2003</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>06/14/2004</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior

to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2.   Claims 1, 2, 4, 7, 8, 11, 12, 14, 17, 20 are rejected under 35 U.S.C. 102(e) as

being anticipated by Bernier et al.(US 6754171)

Bernier et al. disclosed, regarding claim 1, a method for operating a transceiver

(see column 4, line 26, wherein the switch modules correspond to a transceiver)

for an asynchronous data transmission standard to relay data in accordance with a

synchronous data transmission standard (see column 4, lines 27 – 33, wherein

SONET/SDH correspond to a synchronous data transmission standard, ATM

corresponds to an asynchronous data transmission standard), the method comprising:

receiving a remotely transmitted signal formatted in accordance with the

synchronous data transmission standard (see column 5, line 10);

recovering a clock signal from the remotely transmitted signal (see column 6,

lines 51 – 52);

in a first mode, directing the recovered clock signal to a clock input of the

transceiver (see column 6, lines 51 – 56); and in a second mode, directing a locally

generated clock to the clock input (see column 9, lines 1 – 7);

regarding claim 2, switching from the first mode to the second mode upon loss

of the remotely transmitted signal (see column 8, lines 26 – 28, 61 – 64, column 9,

lines 1 – 4);

regarding claim 4, synchronous data transmission standard is a SONET standard

(see column 5, line 10);

regarding claim 7, transferring data recovered from the remotely transmitted

signal to the transceiver for demultiplexing (see column 4, lines 30 – 32, column 5, lines

6 – 8);

regarding claim 8, using the transceiver to multiplex together multiple data

streams to form a data signal for modulation onto an optical signal (see column 5, lines

11 – 14), the data signal being clocked by the recovered clock signal in the first mode

(see column 6, lines 51 – 56) and by the local clock in the second mode (see column 9,

lines 1 – 7).

Bernier et al. disclosed, regarding claim 11, an apparatus for operating a

transceiver (see column 4, line 26, wherein the switch modules correspond to a

transceiver) for an asynchronous data transmission standard to relay data in

accordance with a synchronous data transmission standard (see column 4, lines 27 –

33, wherein SONET/SDH correspond to a synchronous data transmission standard,

ATM corresponds to an asynchronous data transmission standard), the apparatus

comprising:

a transponder that receives a remotely transmitted signal formatted in

accordance with the synchronous data transmission standard and recovers a clock

signal from the remotely transmitted signal (see column 5, lines 10 – 16, column 6,

lines 51 – 52);

a local clock source (see column 9, lines 1 - 4);

and a multiplexer (see column 5, lines 50 – 52, wherein the transmission clock

multiplexers correspond to a multiplexer) that, in a first mode, directs the recovered

clock signal to a clock input of the transceiver (see column 6, lines 51 – 56) and, in a

second mode, directs output of the local clock source to the clock input (see column 9,

lines 1 – 4);

regarding claim 12, the multiplexer switches from the first mode to the second

mode upon loss of the remotely transmitted signal (see column 8, lines 26 – 28, 61 –

64, column 9, lines 1 – 4);

regarding claim 14, wherein the synchronous data transmission

standard is a SONET standard (see column 5, line 10);

regarding claim 17, wherein data recovered from the remotely

transmitted signal is transmitted to the transceiver for demultiplexing (see column

4, lines 30 – 32, column 5, lines 6 – 8).

Bernier et al. disclosed, regarding claim 20, apparatus for operating a transceiver

(see column 4, line 26, wherein the switch modules correspond to a transceiver) for an

asynchronous data transmission standard to relay data in accordance with a

synchronous data transmission standard (see column 4, lines 27 – 33, wherein

SONET/SDH correspond to a synchronous data transmission standard, ATM

corresponds to an asynchronous data transmission standard), the apparatus

comprising:

means for receiving a remotely transmitted signal formatted in accordance

with the synchronous data transmission standard (see column 5, lines 10 – 16, column

6, lines 51 – 52);

means for recovering a clock signal from the remotely transmitted signal (see

column 6, lines 51 – 52);

means for, in a first mode, directing the recovered clock signal to a clock input

of the transceiver (see column 6, lines 51 – 56); and means for, in a second mode,

directing a locally generated clock to the clock input (see column 9, lines 1 – 7).

Claim Rejections - 35 USC § 103

3.   This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

4.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

    1.   Determining the scope and contents of the prior art.
    2.   Ascertaining the differences between the prior art and the claims at issue.
    3.   Resolving the level of ordinary skill in the pertinent art.
    4.   Considering objective evidence present in the application indicating
            obviousness or nonobviousness.

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   Claim 3, 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Bernier

et al. in view of Nham (US 7110354).

        Regarding claim 3, Bernier et al. disclosed all the subject matter of the claimed

invention as recited in paragraph 2 of this office action.

Bernier et al. fail to teach switching from the first mode to the second mode upon loss of recovered framing in the remotely transmitted signal.

Nham from the same or similar field of endeavors teach switching from the first mode to the second mode upon loss of recovered framing in the remotely transmitted signal (see column 5, lines 15 – 22, 27 – 28, 51 – 58).

Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to use switching from the first mode to the second mode upon loss of recovered framing in the remotely transmitted signal in the method taught by Bernier et al. in order to provide efficient data processing by avoiding processing improper data.

Claim 13 is rejected the same reason as above.

7.   Claims 5, 6, 15, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernier et al.

Regarding claims 5, 6, Bernier et al. disclosed all the subject matter of the claimed invention as recited in paragraph 2 of this office action.

Bernier et al. fail to teach the synchronous data transmission standard is a G.709 standard as recited in claim 5;

However, it is well known in the art to use G.709 standard as the synchronous data transmission standard.

Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to use G.709 standard as the synchronous data transmission

standard in the method taught by Bernier et al. in order for more reliable data

transmission by utilizing forward error correction.

Claim 15 is rejected the same reason as above.

Bernier et al. fail to teach the asynchronous data transmission standard is an

Ethernet standard as recited in claim 6;

However, it is well known in the art to use Ethernet standard as the

asynchronous data transmission standard.

Thus, it would have been obvious to a person of ordinary skill in the art at the

time of the invention to use Ethernet standard as the asynchronous data transmission

standard in order to have maximum transmission compatibility.

Claim 16 is rejected the same reason as above.

8.   Claims 9, 10, 18, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Bernier et al. in view of Norimatsu (US 5113152).

Regarding claims 9, 10, Bernier et al. disclosed all the subject matter

of the claimed invention as recited in paragraph 2 of this office.

Bernier et al. fail to teach a phase lock loop that, during the first mode, filtering

the clock input using a phase lock loop operating a first time constant; and when

switching from the second mode to the first mode, filtering the clock input using the

phase lock loop operating at a second time constant, the second time constant being

longer than the first time constant as recited in claim 9; when switching from the first

mode to the second mode, filtering the clock input using the phase lock loop

operating at the first time constant as recited in claim 10.

Norimatsu from the same or similar field of endeavors teach a phase lock loop (

see column 3, line 18) that, during the first mode, filtering the clock input using a phase

lock loop operating a first time constant; and when switching from the second mode to

the first mode, filtering the clock input using the phase lock loop operating at a

second time constant (see column 2, lines 66 – 68, column 3, lines 66 – 68, column 4,

lines 1 – 6, wherein column 3 line 68, the difference or deviation determined by the

comparator is greater than the predetermined value corresponds to the first mode;

column 4, line 4, the deviation becomes smaller than the predetermined value

corresponds to the second mode), the second time constant being longer than the·

first time constant (see column 3, lines 68, column 4, line 6) as recited in claim 9; when

switching from the first mode to the second mode, filtering the clock input using the

phase lock loop operating at the first time constant (see column 2, lines 66 – 68) as

recited in claim 10.

Thus, it would have been obvious to a person of ordinary skill in the art at the

time of the invention to use during the first mode, filtering the clock input using a phase

lock loop operating a first time constant; and when switching from the second mode to

the first mode, filtering the clock input using the phase lock loop operating at a

second time constant, the second time constant being longer than the first time

constant as recited in claim 9; when switching from the first mode to the second mode,

filtering the clock input using the phase lock loop operating at the first time constant as

recited in claim 10 in order to synchronize an internal clock to a particular clock signal

receive from outside and promote rapid frequency tuning (see column 1, lines 26 – 28).

Claims 18, 19 are rejected the same reason as above.

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Sogawa (US 5574757) and Zampetti et al. (US 6943609) are

cited to show methods which are considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Benjamin Su whose telephone number is 571-270-1423.

The examiner can normally be reached on Monday - Friday 10 - 3 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kwang Yao can be reached on 571-272-3182. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KWANG BIN YAO
PRIMARY EXAMINER

BZS